

Australian Species of *Poecilocryptus* Cameron (Ichneumonidae: Hymenoptera)¹

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CAMERON ESTABLISHED a new genus for a species of Australian Ichneumonidae, *Poecilocryptus nigromaculata*, in 1901. He gave a good description of the type and a clear generic diagnosis. The locality, however, is given vaguely as "Australia." Turner and Waterston (1920) described another species, from Tasmania, under the name *P. nigripectus*, and also recorded and figured Cameron's species from Tasmania.

Morley, in 1914, proposed a new name for Cameron's genus, because Kriechbaumer in the same year used *Poecilocryptus* for an entirely different insect from South America. Cushman (1936) has shown that Morley's action was not correct as Cameron's name was published in June, whereas Kriechbaumer's name was published later in the same year. Cushman further points out (1936: 465) that, in proposing *Poecilopimpla* for the supposedly preoccupied *Poecilocryptus* Cameron, Morley overlooked the fact that Cameron (1903: 140) had already used that name. Cushman has further pointed out that it is not necessary to rename *Poecilocryptus* Kriechbaumer, as the same genus was redescribed by Viereck under the name *Photocryptus*.

The systematic position of *Poecilocryptus* is not clear: it shows definite affinities to the pimplinids but also is somewhat allied to the

cryptinids. Morley (1914: 35), who examined the type, states, "If not truly pimplid, at least very far removed from any known form of cryptid." Cameron (1901: 527) connected it with *Phygadeuonini*, though he remarks, "It has no relationship with any other genus." Turner and Waterston (1920: 24) state, "Cameron was probably correct in connecting the genus with the Phygadeuonini." Cushman (1936: 465) considered this genus to belong to the Cryptinae.

Genus POEILOCRYPTUS Cameron

Poecilocryptus Cameron, Ann. and Mag. Nat. Hist. 7(7): 527, 1901. (Nec Kriechbaumer, 1901.)

Poecilopimpla Morley, Rev. Ichneum. Brit. Mus., Pt. 3: 35, 1914. (Nec Cameron, 1903.)

Poecilocryptus Turner and Waterston, Zool. Soc. London, Proc. 1920: 24, figs. 8a, 11b.

Poecilocryptus Cushman, Wash. Acad. Sci., Jour. 26(11): 465, 1936.

Type species: *P. nigromaculatus* Cameron.

Morley (1914: 37) described *P. inflexa* from "Eastern Australia" which, judging from his description, is not correctly placed in this genus. Until the type is examined, the true position of *P. inflexa* will remain doubtful. Morley himself remarks that it probably merits generic rank, because of its vertically much narrower head, basally not discrete and apically truncate clypeus, prominent mandibles,

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small and subpunctiform notauli, large and elongate metathoracic spiracles, the prominent petiolar spiracles, more deplanate abdomen, very large but slightly curved tarsal claws, straight discocubital nervure, centrally strongly incurved second recurrent and genicular nervellus, which emits a very strongly sinuate nervure to apex of the wing. I will not include *P. inflexa* Morley in *Poecilocryptus* Cameron.

Morley (1914: 36) describes some small specimens reared by Froggatt in 1892 from the swollen stems of *Acacia* leaves at Sydney, a male from *Agrizon* galls, Rose Bay, and a third specimen taken by French at Melbourne in 1900.

These specimens Morley considered a variety of *P. nigromaculata*, as he states: "I cannot regard as distinct a much smaller, clear stramineous form with the black markings very much sparser, the sides of the abdomen alone spotted and the legs immaculate: these modifications lend the insects a very different aspect, and the length is but 6-7 mm.; but the structure is in every way identical, and I will simply term it Var. *straminea*."

I have examined a series of a dozen specimens of this small form which Morley considered a variety of *P. nigromaculata* Cameron, and consider it to be without doubt a distinct species.

Although Morley stated that in structure it is in every way identical with *P. nigromaculata*, the specimens I have examined may be separated structurally from Cameron's species thus:

<i>P. nigromaculata</i> Cameron	<i>P. straminea</i> Morley
Postocellar space wider than the ocellocular space	Postocellar space equal to ocellocular space
Antennae longer than fore-wing, with less than 30 joints in flagellum	Antennae shorter than fore-wing, with more than 30 joints in flagellum
Ovipositor not as long as the abdomen	Ovipositor always longer than the abdomen, sometimes nearly 1½ times as long
Length 9-10 mm.	Length 5-7 mm.

On the above differences in structural characters, together with the constant differences in the distribution of the black markings on the abdomen, Morley's variety *straminea* is given specific rank.

KEY TO SPECIES of *poecilocryptus*

1. Radial side of areolet about twice as long as upper inner side of areolet and as long as or longer than lower outer side. 2
 Radial side of areolet equal to upper inner side and shorter than lower outer side of areolet. A crest or tooth at apex of dentiparal area. Spiracles of petiole before middle. **P. nigripectus**
2. Antennae with over 30 joints in flagellum, shorter than length of fore-wing. Second, third, fourth, and fifth tergites of abdomen with lateral spots, more or less discrete. Ovipositor as long as or longer than abdomen. **P. straminea**
 Antennae with less than 30 joints in flagellum, and longer than length of fore-wing. Second, third, and fourth tergites of abdomen with wide basal transverse bands of black, sometimes strongly incised medially, but usually not separated into discrete dorsolateral spots. Fifth tergite has a broad transverse band not incised medially. Ovipositor not as long as abdomen **P. nigromaculatus**

Poecilocryptus nigromaculatus Cameron

Poecilocryptus nigromaculatus Cameron, Ann. and Mag. Nat. Hist. 7(7): 528 ♀, 1901.
Poecilopimpla nigromaculata (Cameron) Morley, Rev. Ichneum. Brit. Mus., Pt. 3: 36, 1914.
Poecilocryptus nigromaculatus Cameron, Turner and Waterston, Zool. Soc. London, Proc. 1920: 26, 1920.
Poecilocryptus nigromaculatus Cameron, Cushman, Wash. Acad. Sci., Jour. 26(11): 465, 1936.

Cameron (1901: 528) vaguely records this species from "Australia." He later (1911: 335) states that Froggatt bred this species from reddish (*Eucalyptus*) berry-shaped galls in September near Inverall, New South Wales. Morley records it from Melbourne, Victoria, during August and September. Turner and Waterston (1920: 26) record it from Mt. Wellington, and Eaglehawk Neck, Tasmania, in January and March.

Material Studied

- 2 Warrendyte, Victoria, October, 1925. Coll. G. F. Hill. (D.S.I.R.O. Collections.)
- 2 Warrendyte, N. D. Coll. G. F. Hill. (D.S.I.R.O. Collections.)
- 4 Warrendyte, Victoria, collected July, 1925, "emerged August 1928." Coll. G. F. Hill.

***Poecilocryptus straminea* Morley**

Poecilopimpla nigromaculata var. *straminea* Morley, Rev. Ichneum. Brit. Mus., Pt. 3: 37, 1914.

This species may be briefly characterized as follows:

As *P. nigromaculatus* Cameron but smaller (5-7 mm.), with the posterior ocelli about their diameter apart, the same distance separating them from the dorsal margin of eyes on either side; antennae subequal to length of fore-wing, and with under 30 joints in flagellum; ovipositor as long or longer than the abdomen; second, third, fourth, and fifth abdominal tergites having dorsolateral spots generally well separated medially; apex of posterior tibiae not infuscated. Morley, who first recognized this species as a variety of *P. nigromaculatus*, only noted the reduction of the black markings of the abdomen and the smaller size.

Morley (1914: 37) recorded this species from swollen stems of *Acacia* leaves at Sydney. In 1892 Froggatt bred the typical female and a male labeled "Agrizom. galls, Rose Bay."

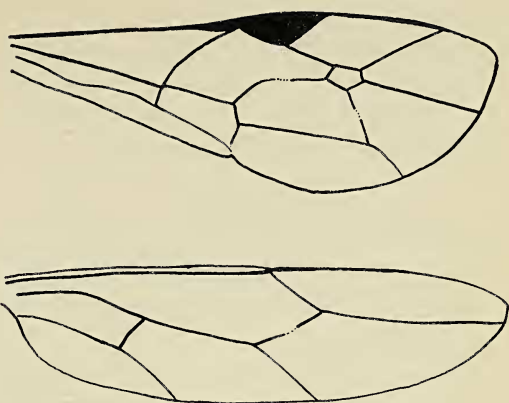


FIG. 1. Fore- and hind-wing of *Poecilocryptus straminea* Morley

A third specimen was captured by French at Melbourne during August, 1900.

Material Studied

- 1 ♂ (Holotype) Sydney. Coll. W. W. Froggatt. (D.S.I.R.O. Collection.)
- 1 ♂ (Paratype) Ourimbah, N.S.W., on *Acacia* galls, Dec., 1925. Coll. W. W. Froggatt. (D.S.I.R.O. Collection.)
- 1 ♂ (Paratype) No. 2055, leaf-stem gall. (D.S.I.R.O. Collection.)
- 1 ♀ 1 ♂ (Holotype: allotype) Box Hill, Victoria. "Bred from Galls with Gall-flies." No. 16747 (identified by L. F. Graham as *P. nigromaculatus* Cameron). On the same card are a species of Chalcidoidea. (D.S.I.R.O. Collection.)
- 2 ♀ 1 ♂ "Blukistan"; gall on *E. obliquus*, May-June, 1888, Smeatin. (S.A.M. Collection.) [The writing on these labels is very indistinct, but the locality, I think, is "Blukistan."]
- 2 ♀ Botanical Gardens (No. 2080), Dec., 1930. Coll. W. W. Froggatt. (D.S.I.R.O. Collection.)
- 1 ♀ 1 ♂ "Malli." Coll. W. W. Froggatt.

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